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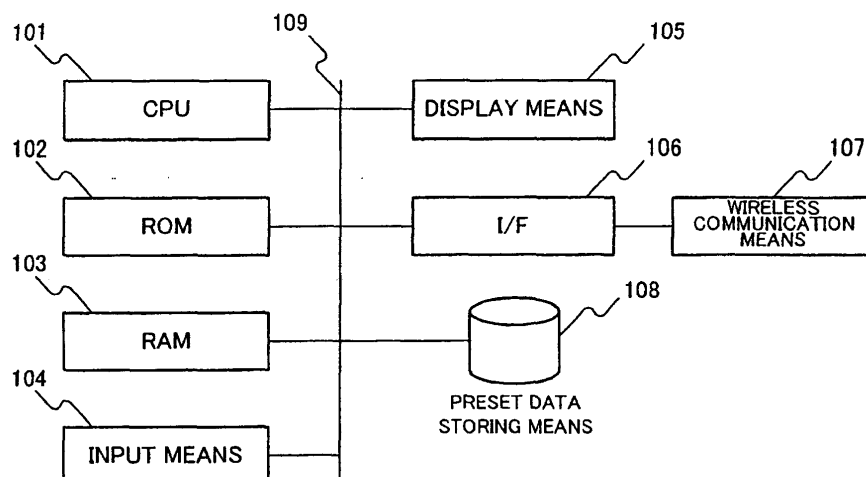
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(54) **System and method for informing whether a user is in wireless lan service**

(57) A preset data storing means (108) stores identification data of the user's own subscribed hot spot data and identification data of a hot spot dealer in roaming contract relation to the own hot spot dealer. A wireless communication means (107) obtains the electric field intensity of a channel as a subject of survey and identification data of a dealer. A means functions, when the obtained identification data is identical with the identification data user's own subscribed hot spot dealer as

stored in the preset data storing means, to display on a display means (105) that the obtained identification data is the identification data of the user's own subscribed hot spot dealer such that the user can understand the displayed content at a glance, and when the obtained data fails to be identical with the roaming contract relation hot spot dealer, to display on the display means (105) that the obtained electric field intensity is that of the roaming contract relation dealer such that the user can understand the displayed content at a glance.

FIG.1





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EUROPEAN SEARCH REPORT

Application Number
EP 03 01 8747

DOCUMENTS CONSIDERED TO BE RELEVANT			
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A	----- US 6 201 962 B1 (CIOTTI JR FRANK D ET AL) 13 March 2001 (2001-03-13) * abstract * * column 1, line 51 - column 4, line 24 *	1,2,4, 6-12,14, 16,17,19	
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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 12 February 2004	Examiner Aguilar Cabarrus, E
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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EUROPEAN SEARCH REPORT

Application Number
EP 03 01 8747

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Place of search Munich		Date of completion of the search 12 February 2004	Examiner Aguilar Cabarrus, E
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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Application Number
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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



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LACK OF UNITY OF INVENTION
SHEET B

Application Number

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1,2,4,6-12,14,16,17,19

Invention I is directed to a system for informing a user that he is in a wireless LAN service area that belongs to the user's own subscribed hot spot dealer or in a wireless LAN service area that belongs to a hot spot dealer that is in roaming contract relation to the user's own subscribed hot spot dealer. The identification data of a dealer is obtained and compared with the identification data of the user's own subscribed hot spot dealer. The result is outputted on a display means.

2. claims: 3,5,13,15,19

Invention II is directed to a system for informing a user of the congestion degree in a wireless LAN service area. To achieve this goal data link layer protocol data is collected.

3. claims: 18,19

Invention III is directed to a method of informing a user that he is in a wireless LAN service area. To achieve this goal an agent authentication means performs authentication and it is displayed that the service area is of the successfully authenticated hot spot dealer.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 03 01 8747

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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12-02-2004

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82